FOUR NEW SCLERORACUS FROM THE WESTERN UNITED STATES

(Homoptera: Cicadellidae)

J. T. MEDLER

University of Wisconsin, Madison

The determination of certain species in the genus Scleroracus Van Duzee (= Ophiola auctt.) is difficult, and particularly troublesome are forms previously known as striatulus Fallén. A study of the internal male genitalia has shown that striatulus Fallén is European, and that several undescribed species are represented in North America. The complex was previously restricted by Ball (1928, Bul. Brooklyn Ent. Soc., 23:190) who described osborni, and Oman (1947, Iowa State Jour. Sci., 21:206) who illustrated the internal male genitalia of vaccinii Van Duzee. Three of the new species described at this time are in the striatulus auctt. complex and have distribution in western North America.

Scleroracus balli Medler, new species

Similar to *osborni* (Ball) in size, shape of the crown, and broad appearance; but much darker in color, with different leg markings and distinctive internal male genitalia. Length: male 4.0 mm., female 4.5 mm. Width of head across the eyes: male 1.3 mm., female 1.5 mm. Crown obtusely angular, one and one-third longer at middle than against the eye, about half as long as the pronotum.

Color: Dark brown in general appearance. Crown, pronotum and scutellum with very dark brown markings, somewhat diffused on pronotum except on anterior margin. Crown with well-defined transverse bands, the bands between eyes connected at middle. Forewing subhyaline, veins broadly margined with fuscous, inner apical cells entirely dusky, outer apical cell not entirely darkened. First cross vein appearing to be broadly white because of fuscous edging. Legs testaceous, heavily marked with brown-black, the fore and middle femora with light bands near middle and at apex, tibiae dark; hind femora dark basally, testaceous apically, except for a narrow dark band just at apex. Genitalia: Aedeagus as illustrated in figure 1, the spine on shoulder resembling that of corniculus (Marshall). Female sternite VII slightly emarginate at middle, lateral margins angled, broadly darkened with fuscous on the posterior margin.

 12, 1931 (R. H. Beamer); 1♂, 2♀♀, Walden, Colo., August 20, 1931 (R. H. Beamer).

Holotype, allotype, and paratypes in the United States National Museum, paratypes in the Kansas University Museum.

This species has been described from the dark forms, but the color is variable. Pale specimens have the lines on the crown faded, infuscation of the forewing reduced, and markings on the legs lost. The band posterior to the ocelli usually remains distinct.

The distribution of balli is predominantly at higher elevations of the Rocky Mountain Region. In addition to the types one hundred and twenty-five specimens in the Kansas University collection have been examined from Colorado (Sloss, Walden, Muddy Pass, Pingree Park), Montana (Anaconda) and Manitoba (Red Deer River, Mafeking, Swan River, Deepdale). The species is named in memory of E. D. Ball.

Scleroracus myralis Medler, new species

Resembles osborni (Ball) in size, and shape of crown, but without the distinctive leg markings of that species. Length: male 4.0 mm., female 4.6 mm. Width of head across the eyes: male 1.2 mm., female 1.6 mm. Crown obtusely angular, slightly longer at middle than against the eye, two-thirds as long as the pronotum.

Color: Light tan or ochreous in general appearance. Crown with brown transverse markings faded, but the typical pattern distinguishable, band posterior to ocelli distinct. Pronotum and scutellum without distinct brown markings. Forewing with varnished texture, hyaline, the veins distinct, narrowly edged with fuscous. Legs light tan, devoid of brown markings. Genitalia: Aedeagus as illustrated in Figure 2. Female sternite VIII very slightly produced at middle, sharply angled at sides.

Holotype male and allotype female: Snyderville, Utah, July 16, 1935 (Oman). Paratypes: $2 \circlearrowleft \circlearrowleft$, $1 \circlearrowleft \circlearrowleft$, Colo. 2009, $1 \circlearrowleft$ Colo. 2158, $2 \circlearrowleft \circlearrowleft$, Colo. 1581; $1 \circlearrowleft$, Snyderville, Utah; $1 \circlearrowleft$, Altus, Utah, 30 July, 1911; $1 \circlearrowleft$, $1 \circlearrowleft$, Yellowstone Park, Wyo., July 20–25, 1920 (AAN).

Holotype, allotype, and paratypes in the United States National Museum. Paratypes in the Minnesota University Museum.

The type is light in color and had faded markings, but the species has darker forms with distinct dark-brown markings on the crown, thorax and scutellum.

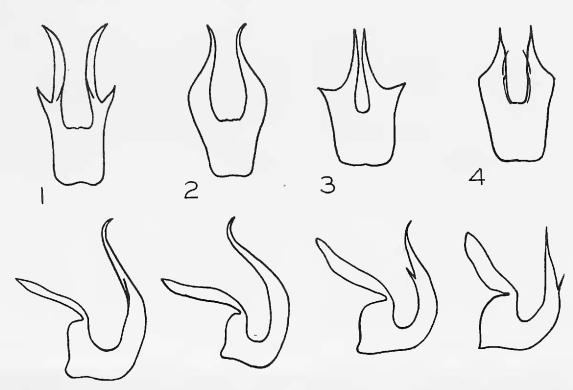
In the dark forms the anterior and middle femora are banded with dark brown at base and before the apex but the posterior femora remain ochreous. The uniformly narrow fuscous edging of the wing veins gives this species a somewhat distinctive appearance in either the pale or dark form.

Scleroracus taramus Medler, new species

Similar to *osborni* (Ball) in the obtusely angled shape of the crown, but with different leg markings, a more contrasting pattern of the forewing, and distinctive internal male genitalia. Length: male 4.5 mm., female 5.0 mm. Width of head across the eyes: male 1.3 mm., female 1.5 mm.

Color: Crown, pronotum and scutellum with distinct fuscous spots and lines, the transverse markings on the crown in characteristic pattern, the posterior and middle bands connected to each other at center and near eyes. Forewing whitish subhyaline, cells and veins outlined distincly with fuscous, inner apical cell smoky. Fore and middle femora twice-banded with fuscous, hind femora unicolorous tawny. Genitalia: Aedeagus as illustrated in Figure 3. Female sternite VII slightly sinuate on posterior margin, the lateral angles acute; the posterior margin marked with brown.

Holotype male and allotype female: RICHFIELD, UTAH, July 15, 1930 (light trap). Paratypes: 1 \, Richfield, Utah, July 15, 1930 (light trap); 1 \, Ft. Collins, Colo., July 19, 1936 (Oman); 1 \, Little Beaver Cr., Colo., July 11, 1937 (R. H. Beamer); 1 \, Dolores, Colo., August 2, 1900; 1 \, Salida, Colo., July 24, 1900; 1 \, T, Macedonia, Colo., July 1, 1931 (R. H. Beamer); 1 \, T, Jemez Springs, N.M., July 15, 1919.



EXPLANATION OF FIGURES

Caudal and lateral views of aedeagus: Fig. 1, Scleroracus balli; Fig. 2, S. myralis; Fig. 3, S. taramus; Fig. 4, S. beameri.

Holotype, allotype, and paratypes in the United States National Museum, paratypes in the Kansas University Museum and DeLong collection.

Scleroracus beameri Medler, new species

Resembling *shastus* (Ball) in the angled shape of the crown; but darker, and with distinctive internal male genitalia. Length: male 4.2 mm., female 4.8 mm. Width of head across the eyes: male 1.3 mm., female 1.5 mm.

Color: Species dark brown in general appearance. Crown, prenotum and scutellum ochreous. Crown distinctly marked with black or dark-brown transverse lines in the pattern characteristic of the genus. Ocelli red. Pronotum with extensive irregular dark markings, anterior margin not marked at middle. Scutellum darkly marked at lateral and posterior angles. Forewing whitish subhyaline, veins distincly whitish, outlined by dark brown, first cross vein and apices of claval veins at commissure broadly white. Fore and mid-femora twice-banded with fuscous, hind femora infuscated. Genitalia: Aedeagus as illustrated in Figure 4. Female sternite VII broadly excavated, lateral angles acute, middle part of entire segment dark brown, posterior margin more widely brown.

Holotype male and allotype female: Hecita, Oregon, July 11, 1935 (R. H. Beamer). Paratypes: $17 \ 3 \ 5$, $7 \ 9 \ 9$, Hecita, Oregon, July 11, 1935 (R. H. Beamer); $2 \ 9 \ 9$, Florence, Oregon, July 11, 1935 (R. H. Beamer); $1 \ 9$, Rochester, Washington, July 22, 1931 (R. H. Beamer); $1 \ 9$, Ft. Lewis, Washington, July 5, 1935 (Oman).

Holotype, allotype, and paratypes in the Kansas University collection, paratypes in the United States National Museum.

I take pleasure in dedicating this species to R. H. Beamer, who for many years was curator of the Snow Collection at Kansas University, and was an indefatigable collector of leafhoppers.

INSECT PHOTO SALON

At its annual meeting on June 25–27, 1958, the Pacific Branch of the Entomological Society of America will hold its third annual Insect Photo Salon at the El Cortez Hotel in San Diego, Calif. All persons, professional or amateur, are invited to submit photographs of insects, spiders, and related arthropods for exhibit at this Salon. All requests for entry blanks and information as to entries should be addressed to: Dr. Leland R. Brown, Cochairman, Insect Photo Salon Committee, Department of Entomology, University of California, 300 Veteran Avenue, Los Angeles 24, Calif.